

DESCRIPTION:

Inverted bucket steam trap with integral strainer and all stainless steel internals. Best suited for equipment drains with low condensate loads. Intermittent operation.

FEATURES:

The inverted bucket arrangement operates on the density difference between steam and water, giving a cyclic operation for discharge of the accumulated condensate.

High condensate handling capacities even at low pressure, permit the use of small trap sizes to suit many applications.

The valve and valve seat are hardened by a special induction hardening process to withstand continuous prolonged operation.

Perfect shut-off, no steam loss.

SIZES : NPS ¾, 1 (DN 20, 25)

CONNECTIONS: Screwed (NPT/BSPT/BSP)

LIMITING CONDITIONS:

PMA: Max. operating pressure	228 psig	16 kg/cm ² (g)
TMA: Max. operating temp.	428 °F	220 °C
Maximum operating back pressure at the outlet should not exceed 90% of the inlet pressure.		
Minimum diff. pressure for satisfactory operation	1.5 psi	0.1 kg/cm ²
Cold hydro test pressure	456 psig	32 kg/cm ² (g)

INSTALLATION:

The trap should be fitted with the inlet and outlet connections horizontally in-line. Correct fitment with body vertical is essential for easy movement of the bucket. The bypass arrangement should be above the level of the trap.

Full port isolation valves should be fitted before and after the trap, to be used when the trap has to be opened for maintenance.

AVAILABLE SPARES:

SPARE KIT: Valve Pin, Valve Seat, Bracket & Lever Assly. (Op. diff. press. should be specified) Bucket Assly, Set of Gaskets, Strainer Screen.



MAINTENANCE:

This product can be maintained inline without disturbing the piping connections. Ensure that the trap is isolated - upstream & downstream - before attempting to dismantle it. It is recommended that the trap be opened periodically and the internals inspected for wear, damage, and dirt. All worn or damaged parts should be replaced with new spares. A full new internal kit comprising of the valve pin, valve seat, bracket and lever, should be replaced as a set. The bucket vent hole should be cleaned. The strainer screen should be removed and cleaned regularly.

IMPORTANT:

Ensure that the trap is primed by opening the inlet valve only a crack at start-up, allowing water to fill the trap before the steam enters. The inlet valve should be opened fully only after the trap is filled with water.

The trap should be installed as close as possible to the equipment to be drained.

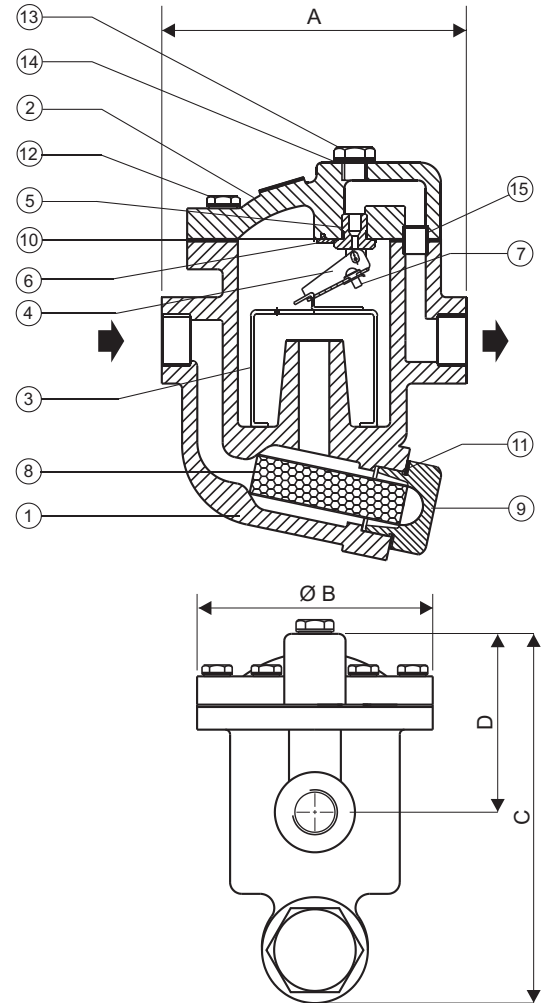
For new pipelines, ensure that the lines are properly flushed, prior to fitting the trap.

ORDERING INFORMATION:

Refer to "HOW TO ORDER" page.

MATERIAL:

No.	PART	MATERIAL	QTY.(Nos.)
1.	BODY	CAST IRON	01
2.	COVER	CAST IRON	01
3.	BUCKET ASSLY.	AISI 304 with CS reinforcing ring (where applicable)	01
4.	LEVER ASSLY.	AISI 304	01
5.	VALVE SEAT (HARDENED)	13% CR STEEL / AISI 410/420	01
6.	BRACKET	AISI 304	01
7.	VALVE PIN (HARDENED)	13% CR STEEL / AISI 410/420	01
8.	STRAINER SCREEN	AISI304 (Perforated Sheet)	01
9.	STRAINER CAP	ASTM A743 Gr CA40	01
10.	GASKET (COVER)	CAF / Non CAF	01
11.	GASKET (STRAINER)	CAF / Non CAF	01
12.	BOLT	ASTM A193 Gr. B7	06
13.	PLUG	CARBON STEEL	01
14.	GASKET (PLUG)	CAF / Non CAF	01
15.	LOCATING TUBE	STAINLESS STEEL	01


DIMENSIONS - Nominal in inches (mm)

MODEL	SIZE	A	B	C	D	Wt.
PT23L-20	3/4", DN20	4.72	3.95	6.15	2.8	8.15 lbs
PT23L-25	1", DN25	(120)	(100)	(156)	(71)	3.70 kg

TRAP DISCHARGE CAPACITY IN lbs/hr

Model	Orifice Size	DIFFERENTIAL PRESSURE psi									
		7	14	30	43	57	70	85	100	120	142
PT23L-20	3/32"	88	175	275	310	395	420	460	495	540	570
	7/64"	145	255	395	475	550	585	615	640	660	
PT23L-25	1/8"	240	350	460	550	615	-----	-----	-----	-----	-----

TRAP DISCHARGE CAPACITY IN kg/hr

Model	Orifice Size	DIFFERENTIAL PRESSURE kg/cm ²									
		0.5	1.0	2.0	3.0	4.0	5.0	6.0	7.0	8.5	10.0
PT23L-20	2.5 mm	40	80	125	140	180	190	210	225	245	260
	2.8 mm	65	115	180	215	250	265	280	290	300	-----
PT23L-25	3.2 mm	110	160	210	250	280	-----	-----	-----	-----	-----

Guidelines on use of Capacity Chart

- Go to the differential pressure column corresponding to or slightly higher than, but not less than the operating differential pressure at which the trap is to be used. Move vertically downwards and select a suitable model and orifice size.
- The selected capacity should be equal to or higher than the condensate load after including a safety factor of 2 to 3. Oversizing is not recommended.
- Example - Operating conditions = I) Inlet press. 57 psig (4kg/cm²(g)) II) Back press. 14 psig (1 kg/cm²(g)) III) Condensate load 150 lbs/hr. (68 kg/hr.) IV) Safety factor 2.
Model Selected: PT23L-20/25 • Orifice Size : 3/32" (2.5 mm) • Capacity 310 lbs/hr (140 kg/hr) @ a diff. press. of 43 psi. (3 kg/cm²)

Local regulations may restrict the use of this product below the conditions quoted. Limiting conditions refer to standard connections only. In the interest of development and improvement of the product, we reserve the right to change the specifications without prior notice.